



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

CHRISTINE TODD WHITMAN
Governor

ROBERT C. SHINN, JR.
Commissioner

SEP 22 1994

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. P 249 580 265

Sharon Jaffess
USEPA, Region II
Emergency/Remedial Response
26 Federal Plaza, Room 759
New York, NY 10278

Re: L. E. Carpenter & Company
Wharton Borough, Morris County
Cultural Resource Survey

Dear Ms. Jaffess:

Pursuant to our conversation on September 20, 1994, there is an possibility that a State IB Cultural Resource Survey (CRS) will need to be performed at the L. E. Carpenter Superfund Site. A Stage IA Cultural Resource Survey was completed and reviewed by USEPA in September 1992. A copy of the Stage IA CRS can be found in the Final Supplemental Remedial Investigation Addendum dated September 1992.

USEPA was unable to determine if a Stage IB CRS was necessary because specific excavation locations were not designated at that time. L. E. Carpenter has submitted a draft Remedial Action Workplan which specifies the proposed areas and depth of hot spot excavation. Attached please find a copy of a map of the site which designates areas of hot spot excavation and an excerpt from the RAW which discusses the depth. I am confident that this material will enable USEPA to determine if any further surveys are necessary.

Since any future work will hinge on your determination, I would appreciate your determination by October 15, 1994. Should you have any questions, or need additional information, please contact me at (609) 633-1455. Thank you for your continuing cooperation.

Sincerely,

Christina H. Purcell, Case Manager
Bureau of Federal Case Management

cc: John Prendergast, BEERA

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All collected samples were extracted upon submittal to the laboratory. A phased approach was taken in determining which samples to analyze. Analysis was initially requested for samples collected on a 20 foot by 20 foot grid. Sample spacing was slightly modified from the plan based on field conditions (for example, insufficient soil for sample collection at a grid node due to surface features). Those results were reviewed in order to determine which additional sample extracts required analysis to further refine extent of soils requiring remediation for PCBs.

A total of 96 soil samples were collected. A total of fifty-five soil samples, two field duplicates and one field blank were analyzed for PCBs by Method 8080, (USEPA SW 846, Test Methods for Evaluating Solid Waste, Third Edition). The analyses indicated the presence of Aroclor 1254 at concentrations ranging from 0.14 parts per million (ppm) to 45 ppm. No additional PCB congeners were detected. The concentrations of Aroclor 1254 detected in the samples are presented on Figure 2-6. Review of these results indicate that surface soils with PCB concentrations in excess of remedial goals cover an area approximately 11850 ft².

2.7 DEFINITION OF PHASE I AREAS OF CONCERN

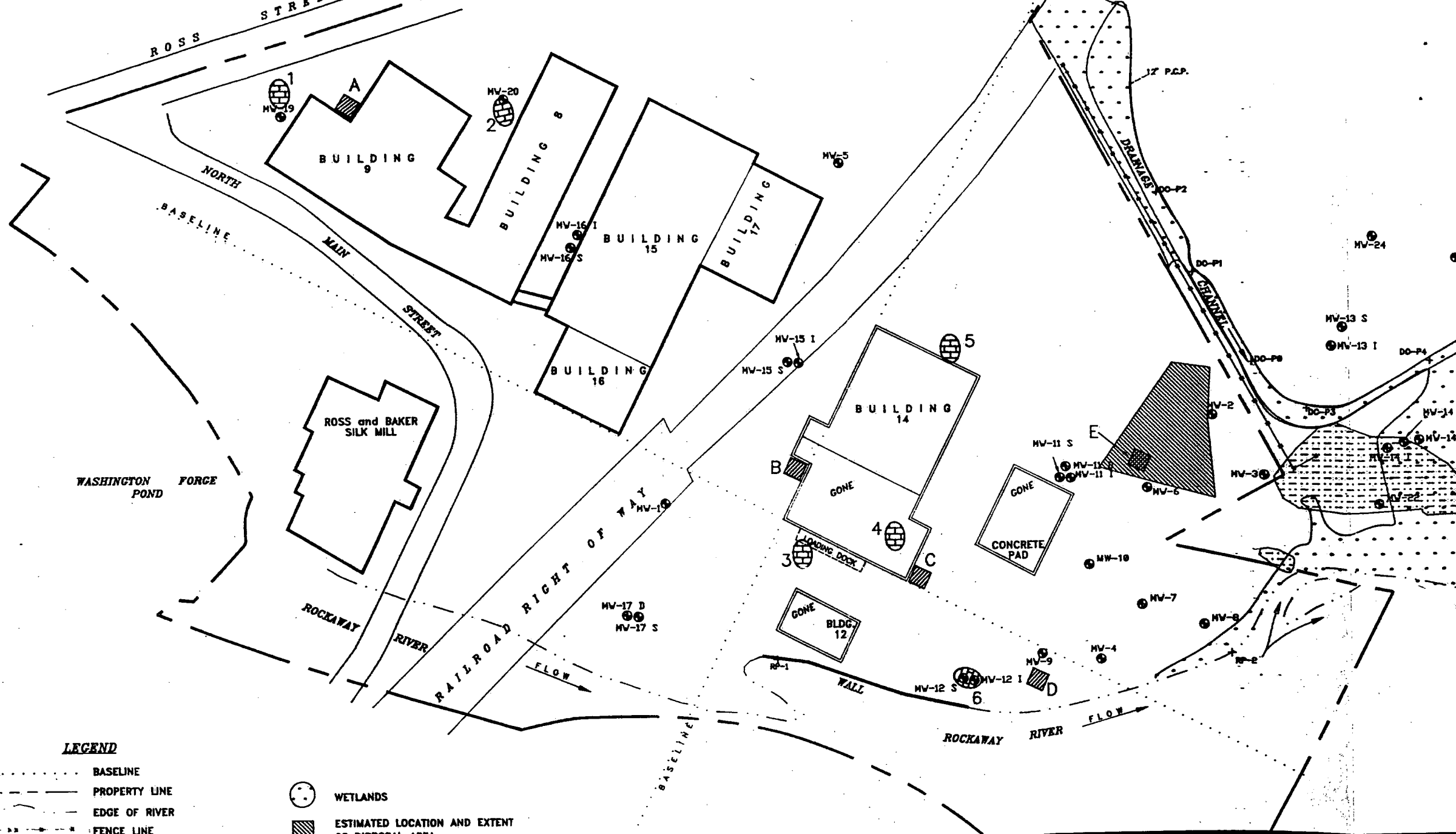
Phase I areas of concern are limited to soil "hot-spots" that were identified during the RI. Post-RI investigations have further delineated the extent of two of the hot spots, namely the former disposal and PCB areas. The following subsections describe the locations, contaminants, and concentrations of the hot spots which will be remediated as part of the Phase I Remedial Action program. The areas described are depicted on Figure 2-7. Remedial goals for the site, as included in the ROD, are presented in Appendix E.

2.7.1 Inorganic Hot Spots

Five locations identified during the RI indicated the presence of inorganic compounds, primarily antimony and lead, at concentrations exceeding the site specific cleanup goals as defined in the ROD.

Hot spot A is located adjacent to the northwestern loading dock of Building 9. Hand auger sample HA-19 was used to identify this hot spot. The sample indicated antimony at a concentration of 828 mg/kg at a depth of 0 - 0.5 feet BGS. Analysis for hand auger sample HA-18, located approximately 20 feet from HA-19, did not detect antimony. This hot spot is estimated to encompass an area of 20 feet by 20 feet by 2 feet depth, for a total volume of 30 yd³. No contaminants other than antimony were detected at concentrations which exceed cleanup criteria.

Hot spot B is located adjacent to the western loading dock of former Building 14. Hand auger sample HA-4 was used to identify this hot spot. The sample indicated lead at a concentration of 2230 mg/kg and chromium at a concentration of 493 mg/kg at a depth of 0 - 0.5 feet BGS. Hand auger sample HA-5, located approximately 20 feet from HA-4, did not detect any contaminant at concentrations which exceeded cleanup criteria. This hot spot is estimated to



LEGEND

- BASELINE
- PROPERTY LINE
- EDGE OF RIVER
- FENCE LINE

- MV-6 MONITORING WELLS
- DO-P2 DRAINAGE CHANNEL POINTS
- RP-2 RIVER POINTS

- ⊙ WETLANDS
- ▨ ESTIMATED LOCATION AND EXTENT OF DISPOSAL AREA
- ⊙ LOCATION AND ESTIMATED EXTENT OF ORGANIC HOTSPOTS
- ⊙ LOCATION AND EXTENT OF PCB AREA
- ⊙ LOCATION AND EXTENT OF METAL HOTSPOTS

GRAPHIC SCALE



WESTON
MANAGERS DESIGNERS/CONSULTANTS

PROJECT NAME: **FINAL FEASIBILITY STUDY REPORT**

WHARTON, NEW JERSEY
CLIENT NAME:

L.E. CARPENTER AND COMPANY

DATE:

encompass and area of 20 feet by 20 feet by 2 feet depth, for a total volume of 30 yd³. No contaminants other than lead were detected at concentrations which exceed cleanup criteria.

Hot spot C is located adjacent to the southern corner of former Building 14. Hand auger sample HA-2, collected during the RI, was used to identify this hot spot. The sample indicated lead at a concentration of 693 mg/kg, antimony at a concentration of 413 mg/kg, DEHP at a concentration of 13000 mg/kg at a depth of 0 - 0.5 feet BGS. This hot spot is estimated to be 30 feet by 30 feet by 2 feet depth, for a total volume of 67 yd³. This hot spot will be remediated under Phase I for metals. Remediation will be considered complete under Phase I when the post-excavation samples indicate inorganic concentrations are within the site specific cleanup goals.

Hot spot D is located in the southern portion of the site, near the Rockaway River and monitoring well MW-9. Test pit sample TP-9A, collected during the RI, was used to identify the hot spot. The sample indicated lead at a concentration of 6530 mg/kg, and antimony at a concentration of 438 mg/kg. Sample TP-9B, collected at a depth of 2 - 2.5 feet BGS indicated lead at a concentration of 338 mg/kg and antimony at a concentration of 89 mg/kg. This hot spot is estimated to encompass an area of 30 feet by 30 feet by 2 feet depth, for a total volume of 67 yd³.

The easternmost hot spot identified (indicated on Figure 2-7 as E) is within the physical confines of the disposal area (described in Section 2.7.3), and therefore is not included in this area of concern, but will be addressed during remediation of the disposal area.

2.7.2 DEHP/Organic Hot Spots

Five locations were identified as organic hot spots. These are defined as areas where soils indicated the presence of organic contaminants (primarily DEHP) which exceed the site specific cleanup criteria. These areas are not contiguous with the organic contaminated soils on site, and are therefore being remediated as hot spots during Phase I.

A sixth hot spot was not identified by soil sampling results, but rather by free phase product observed in monitoring well MW-12s. This area is being included in Phase I remedial action because it is not contiguous with the organic contamination. The remedial action proposed for this area is consistent with remedial activities which will be performed on other hot spots during Phase I remediation.

Hot spot 1 is located to the west of building 9, and is associated with former underground storage tanks (USTs) E-3 and E-4. Four test pit samples were collected during the RI (1989). One of these four samples (TP-63) collected at a depth of 7.5 - 8 feet BGS, indicated the presence of DEHP at a concentration of 430 mg/kg. The concentration of DEHP in the other three samples were less than the cleanup criteria of 100 mg/kg.

Sample TP-63 was collected prior to the tank closures. The tanks were closed in 1991, following the remedial investigation sample collection. The tank excavation extended to a total depth of 5 feet BGS and were filled with certified clean fill. Therefore, the shallowest possible depth of contaminated soil in this area is 5 feet BGS. Hot spot 1 is estimated to encompass an area of 15 feet by 15 feet by 5 feet thick, for a total volume of 42 yd³.

Hot spot 2 is located to the west of Building 8, and is associated with former USTs E-5 and E-8. Eight test pit samples were collected during the RI. Six of the eight samples indicated the presence of DEHP at concentrations which exceed the cleanup criteria. The highest concentration detected in these samples was 6200 mg/kg. These samples were collected prior to the tank closures, at depths ranging from 4.5 - 5.5 feet BGS.

Tanks E-5 and E-8 were closed in 1991, following the remedial investigation sample collection. The tank excavation extended to a total depth ranging from 8 feet BGS to 10 feet BGS, deeper than the RI soil samples. The post closure soil samples, collected from the bottom of the excavation, were not analyzed for base neutral extractable compounds. The tank excavations were filled with certified clean fill. It is likely that hot spot 2 was remediated during tank closure activities. Soil samples will be collected and analyzed for DEHP prior to initiating excavation activities at this hot spot, to determine if contamination remains. If remediation is warranted, this hot spot, as originally defined in the RI, is estimated to encompass an area of 50 feet by 50 feet by 5 feet thick, for a total volume of 463 yd³.

Hot spot 3 is located adjacent to the southern loading dock of former Building 14. Hand auger sample HA-6, collected during the RI, was used to identify the hot spot. The sample indicated DEHP at a concentration of 230 mg/kg at a depth of 0 - 0.5 feet BGS. Hand auger sample HA-7, located approximately 20 feet from HA-6, did not detect any contaminant at concentrations which exceeded cleanup criteria. This hot spot is estimated to encompass an area of 20 feet by 20 feet by 2 feet depth, for a total volume of 30 yd³. No contaminants other than DEHP were detected at concentrations which exceed cleanup criteria.

Hot spot 4 is associated with a floor drain in former Building 14. Hand auger sample HA-1, collected during the RI, was used to identify the hot spot. The sample indicated DEHP at a concentration of 15000 mg/kg at a depth of 0 - 0.5 feet BGS. This hot spot is estimated to encompass an area of 20 feet by 20 feet by 2 feet depth, for a total volume of 30 yd³. No contaminants other than DEHP were detected at concentrations which exceed cleanup criteria.

Hot spot 5 is located on the northern side of former Building 14, adjacent to the former floor drain discharge point. Hand auger sample HA-3, collected during the RI, was used to identify the hot spot. The sample indicated DEHP at a concentration of 160 mg/kg at a depth of 0 - 0.5 feet BGS. This hot spot is estimated to encompass an area of 20 feet by 20 feet by 2 feet depth, for a total volume of 30 yd³. No contaminants other than DEHP were detected at concentrations which exceed cleanup criteria.

- * Hot spot 6 is associated with monitoring well MW-12. This location has been included due to the free product identified in MW-12. The areal extent of the product has been defined by the location of the A-series well points, and is estimated as 50 feet by 30 feet by 6 feet thickness, for a total volume of 330 yd³. The contaminants have been tentatively identified (using fingerprint analysis) as predominantly xylenes, and similar in composition to the floating product identified under the central eastern portion of the site.

2.7.3 Disposal Area

The disposal area is located on the eastern portion of the property. The areal extent of this area was determined using a series of test trenches, installed on site in January 1992. The material encountered during the test trenching operation was described as a heterogeneous mixture of a grayish-white chalky fill material, dried sludge, drum debris and metal, and pieces of wood. Analyses of two samples collected from the fill material indicate the presence of ethylbenzene, xylenes, methylene chloride, DEHP, antimony, and lead at concentrations in excess of cleanup criteria. The areal extent of the hot spot will be visually refined during excavation, and is currently estimated as 8500 ft² by 1 foot thickness, for a total volume of 300 yd³.

2.7.4 PCB Contaminated Soils

An area of soils contaminated with Aroclor 1254 was identified during the RI. The extent of this area was further defined during the delineation sampling conducted in December 1993. This area is depicted on Figures 2-6 and 2-7. Analyses of 64 surface soil (0 - 0.5 feet BGS) samples have indicated the presence of Aroclor 1254 at concentrations up to 45 mg/kg. Nine of the samples were analyzed during the RI, with the remaining 55 samples being analyzed under the delineation program. The delineation program has indicated an area of 11,850 ft² of surface soils with PCBs in excess of the cleanup criteria of 2 mg/kg. Assuming a depth of 2 feet, the total volume of soils associated with this hot spot is 880 yd³.